

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IFW

Application No. : 10/507,177
First Named Inventor : Michael M. BUTLER
Filed : January 23, 2006
TC/A.U. : 2881
Examiner : To Be Assigned

Confirmation No. : 4396

Docket No. : 101709.55374US
Customer No. : 23911

Title : Reflection Reduction

REQUEST FOR CORRECTED OFFICIAL FILING RECEIPT

Mail Stop Applications Branch

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

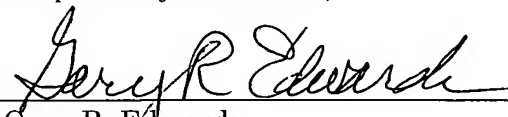
On the attached copy of the Official Filing Receipt, it was noted that the filing date and title were incorrect. Please make the changes to reflect the correct filing date which is **01/23/2006** instead of 09/10/2004 and the correct title which is **Reflection Reduction** instead of Plane Elements for the Absorption or Reduction of the Reflection of Electromagnetic Waves, as shown on the receipt.

Kindly return the "Corrected" Official Filing Receipt to the undersigned attorney of record.

Please charge any additional fee or credit any overpayment to the Deposit Account of Crowell & Moring, L.L.P., Account No. 05-1323, Docket No.: 101709.55374US.

Respectfully submitted,

May 2, 2006



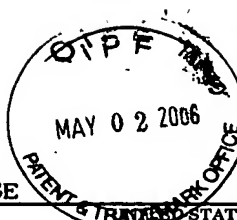
Gary R. Edwards
Registration No. 31,824

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
GRE:jdp
2759222

BEST AVAILABLE COPY



UNITED STATES PATENT AND TRADEMARK OFFICE



5537405

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

| APPL NO. | FILING OR 371 (c) DATE | ART UNIT | FIL FEE REC'D | ATTY. DOCKET NO | DRAWINGS | TOT CLMS | IND CLMS |
|------------|---------------------------|----------|---------------|-----------------|----------|----------|----------|
| 10/507,177 | 09/10/2004 01/23/2006 | 2881 | 1028 | 038665.55374US | 1 | 26 | 2 |

CONFIRMATION NO. 4396

23911
 CROWELL & MORING LLP
 INTELLECTUAL PROPERTY GROUP
 P.O. BOX 14300
 WASHINGTON, DC 20044-4300

FILING RECEIPT



OC000000018532808

Date Mailed: 04/14/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Michael Maurice Butler, Isle of Wight, UNITED KINGDOM;

Power of Attorney: The patent practitioners associated with Customer Number 23911.

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/GB04/03272 07/28/2004

Foreign Applications

UNITED KINGDOM 0319636.7 08/21/2003
 UNITED KINGDOM 03255172.3 08/21/2003

Projected Publication Date: 07/20/2006

Non-Publication Request: No

Early Publication Request: No

Title

Reflection Reduction
Plane-elements for the absorption or reduction of the reflection of electromagnetic waves—

Preliminary Class

250

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

**LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15**

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject

matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

* * * COMMUNICATION RESULT REPORT (JAN.23.2006 14:42PM) * * *

FAX HEADER:

| FILE MODE | OPTION | ADDRESS (GROUP) | RESULT | PAGE |
|-----------|-----------|------------------|--------|--------|
| 843 | MEMORY TX | 95712739880#5893 | OK | P. 6/6 |

3rd Submission
to PTO

REASON FOR ERROR
E-1) HANG UP OR LINE FAIL
E-3) NO ANSWER

E-2) BUSY
E-4) NO FACSIMILE CONNECTION

P.O. Box 14300, Washington, DC 20044-4300 • p202 624-2500 • f202 628-8844

crowell  **moring**

FACSIMILE COVER PAGEDate January 23, 2006To: Anita JohnsonFacsimile Telephone Number: 571-273-9880Total Number of Pages (Includes Cover Sheet): 6From: Gary R. Edwards, Reg. No. 31,824Phone: 202-624-2500Serial No.: 10/507,177User ID: 1317Attorney Docket No: 101709.55374US


Message: Per your recent telephone request, attached is a third submission with an express request to begin national examination

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| | | | |
|---|-------------------------------------|---|--|
| TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371 | | ATTORNEY'S DOCKET NUMBER | |
| | | 101709.55374US | |
| | | U.S. APPLICATION NO. (If known, see 37 CFR 1.5) | |
| | | 10/507,177 | |
| INTERNATIONAL APPLICATION NO. | INTERNATIONAL FILING DATE | PRIORITY DATE CLAIMED | |
| PCT/GB04/003272 | 28 July 2004 (28.07.2004) | 21 August 2003 (21.08.2003) | |
| TITLE OF INVENTION | | | |
| REFLECTION REDUCTION | | | |
| APPLICANT(S) FOR DO/EO/US | | | |
| Michael M. BUTLER | | | |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: | | | |
| 1. | <input type="checkbox"/> | This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. | |
| 2. | <input checked="" type="checkbox"/> | This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. | |
| 3. | <input checked="" type="checkbox"/> | This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. | |
| 4. | <input type="checkbox"/> | The US has been elected (Article 31). | |
| 5. | <input type="checkbox"/> | A copy of the International Application as filed (35 U.S.C. 371(c)(2)) | |
| | <input type="checkbox"/> | a. Is attached hereto (required only if not communicated by the International Bureau). | |
| | <input type="checkbox"/> | b. has been communicated by the International Bureau. | |
| | <input type="checkbox"/> | c. Is not required, as the application was filed in the United States Receiving Office (RO/US). | |
| 6. | <input type="checkbox"/> | An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). | |
| | <input type="checkbox"/> | a. is attached hereto. | |
| | <input type="checkbox"/> | b. has been previously submitted under 35 U.S.C. 154(d)(4). | |
| 7. | <input type="checkbox"/> | Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) | |
| | <input type="checkbox"/> | a. are attached hereto (required only if not communicated by the International Bureau). | |
| | <input type="checkbox"/> | b. have been communicated by the International Bureau. | |
| | <input type="checkbox"/> | c. have not been made; however, the time limit for making such amendments has NOT expired. | |
| | <input type="checkbox"/> | d. have not been made and will not be made. | |
| 8. | <input type="checkbox"/> | An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). | |
| 9. | <input type="checkbox"/> | An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). | |
| 10. | <input type="checkbox"/> | An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). | |
| Items 11 to 20 below concern document(s) or information included: | | | |
| 11. | <input type="checkbox"/> | An Information Disclosure Statement under 37 CFR 1.97 and 1.98. | |
| 12. | <input type="checkbox"/> | An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. | |
| 13. | <input type="checkbox"/> | A preliminary amendment. | |
| 14. | <input type="checkbox"/> | An Application Data Sheet under 37 CFR 1.76. | |
| 15. | <input type="checkbox"/> | A substitute specification. | |
| 16. | <input type="checkbox"/> | A power of attorney and/or change of address letter. | |
| 17. | <input type="checkbox"/> | A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825. | |
| 18. | <input type="checkbox"/> | A second copy of the published International Application under 35 U.S.C. 154(d)(4). | |
| 19. | <input type="checkbox"/> | A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). | |
| 20. | <input type="checkbox"/> | Other items or information: | |

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| | | | | | |
|---|-------------------------------------|---|---|---|--------------|
| U.S. APPLICATION NO. (if known, see 37 CFR 1.5) 10/507,177 | | INTERNATIONAL APPLICATION NO. | | ATTORNEY'S DOCKET NUMBER 101709.55374US | |
| The following fees have been submitted | | | | CALCULATIONS | PTO USE ONLY |
| 21. | <input checked="" type="checkbox"/> | Basic national fee (37 C.F.R. §1.492(a))..... | \$300.00 | \$ | |
| 22. | <input checked="" type="checkbox"/> | Examination fee (37 C.F.R. §1.492(c)) | | | |
| If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) | | | | \$0.00 | |
| All other situations | | | | \$200.00 | |
| 23. | <input checked="" type="checkbox"/> | Search fee (37 C.F.R. §1.492(b)) | | | |
| If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) | | | | \$0 | |
| Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority..... | | | | \$100 | |
| International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB..... | | | | \$400 | |
| All other situations | | | | \$500 | |
| TOTAL OF 21, 22 AND 23 = | | | | \$ | |
| <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. | | | | | |
| Total Sheets | Extra Sheets | Number of each additional 50 or fraction thereof (round up to a whole number) | RATE | | |
| - 100 | / 50 = | | x 250 | \$ | |
| Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(h)). | | | | \$ | |
| CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE | | |
| Total claims | - 20 | | x 50 | \$ | |
| Independent claims | - 3 | | x 200 | \$ | |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable) | | | + 360 | \$ | |
| TOTAL OF ABOVE CALCULATIONS = | | | | \$ | |
| <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2. | | | | | |
| SUBTOTAL = | | | | \$ | |
| Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). | | | | \$ | |
| TOTAL NATIONAL FEE = | | | | \$ | |
| Fee for recording the enclosed assignment (37 CFR 1.21 (h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property | | | | \$ | |
| TOTAL FEES ENCLOSED = | | | | \$ | |
| | | | | Amount to be refunded: | \$ |
| | | | | Amount to be charged: | \$ |
| <p>a. <input type="checkbox"/> A check in the amount of \$ to cover the above fees is enclosed.</p> <p>b. <input type="checkbox"/> Please charge my Deposit Account No. 05-1323 (Attorney Docket No. 101709.55374US) in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed.</p> <p>c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 05-1323 (Attorney Docket No. 101709.55374US). A duplicate copy of this sheet is enclosed.</p> <p>d. <input type="checkbox"/> Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</p> | | | | | |
| <p>NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.</p> | | | | | |
| <p>SEND ALL CORRESPONDENCE TO:</p> <p>Crowell & Moring, LLP Intellectual Property Group P.O. Box 14300 Washington, D.C. 20044-4300 Tel. No. (202) 624-2500 Fax No. (202) 628-8844</p> <p>GRE:kms 2704254v1</p> | | | | | |
| | | | <p style="text-align: center;"></p> <p>SIGNATURE Gary R. Edwards</p> <p>NAME 31,824</p> <p>REGISTRATION NUMBER January 24, 2006</p> <p>DATE</p> | | |


PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

| | | | |
|---|--|---|-----------------------|
| Applicant's or agent's file reference XA1818 | FOR FURTHER ACTION | | See Form PCT/IPEA/416 |
| International application No. PCT/GB2004/003272 | International filing date (<i>day/month/year</i>) 28.07.2004 | Priority date (<i>day/month/year</i>) 21.08.2003 | |
| International Patent Classification (IPC) or national classification and IPC H01Q15/00, H01Q17/00 | | | |
| Applicant AMS LIMITED ET AL. | | | |
| 1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of 5 sheets, including this cover sheet. 3. This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> <i>sent to the applicant and to the International Bureau</i> a total of 2 sheets, as follows: <input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions). | | | |
| 4. This report contains indications relating to the following items: <input checked="" type="checkbox"/> Box No. I Basis of the opinion <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input checked="" type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application | | | |
| Date of submission of the demand 30.05.2005 | | Date of completion of this report 28.06.2005 | |
| Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016 | | Authorized Officer Moumen, A Telephone No. +31 70 340-4411 | |



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2004/003272

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-6 as originally filed

Claims, Numbers

1-10 received on 30.05.2005 with letter of 25.05.2005

Drawings, Sheets

1/1 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2004/003272

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|----------|
| Novelty (N) | Yes: Claims | 4,5,7-9 |
| | No: Claims | 1-3,6,10 |
| Inventive step (IS) | Yes: Claims | |
| | No: Claims | 4,5,7-9 |
| Industrial applicability (IA) | Yes: Claims | 1-10 |
| | No: Claims | |

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

The following documents (D) are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

| | | |
|------------------|-------------------|-----------------|
| D1: US 5 204 680 | (Racal Defence) | 20 April 1993 |
| D2: US 4 118 704 | (TDK Electronics) | 3 October 1978 |
| D3: US 5 057 842 | (Vegla) | 15 October 1991 |

1. The document D1 discloses (the references in parentheses applying to this document):

an apparatus (Fig. 1) for reducing the electromagnetic radiation reflected from at least one object in the direction of at least one electromagnetic radiation receiver (column 1, line 43- line 47), the apparatus comprising an array, located between each object and receiver for reflecting and dispersing incident electromagnetic radiation away from each receiver, the array having a plurality of substantially reflective panels, wherein the panels are arranged at different angles to the plane of the array (Fig. 6, column 6, lines 41-52, column 1, lines 17-21).

Contrary to the applicant opinion, the objective problem solved by the document D1 can be seen as how to reduce the electromagnetic radiation reflected from one or more objects in directions of one or more receivers (known in this art as RCS reduction)) over a band of frequencies (cf. column 1, line 52, " This allows operation over a wide signal frequency band", column 6, lines 41-46, "... respond to the detected frequency ..."). Hence, the document D1 solves the same problem as in the current application.

The subject-matter of claim 1 and corresponding method claim 10 is therefore not new (Article 33(2) PCT).

2. Document D1, which is considered to represent the most relevant state of the art,

discloses (cf. Fig. 1) an apparatus according to claim 1 from which the subject-matter of claim 5 differs in that at least one of the panels is absorptive to electromagnetic radiation.

However, these features have already been employed for the same purpose in a similar apparatus, see document D2, Fig. 10. It would be obvious to the person skilled in the art, namely when the same result is to be achieved, to apply these features with corresponding effect to an apparatus according to document D1, thereby arriving at an apparatus according to claim 5. The subject-matter of claim 5 does therefore not involve an inventive step (Articles 33(3)).

3. Dependent claims 2-4 and 6-9 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT with respect to novelty and/or inventive step as the relevant subject matter is either disclosed in the cited documents or falls within the knowledge and ability of the skilled person.

Re Item VII

Certain defects in the international application

1. The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).
2. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1-D3 is not mentioned in the description, nor are these documents identified therein.

- 7 -

CLAIMS

1. ~~Apparatus for reducing the electromagnetic radiation reflected from at~~
least one object in the direction of at least one electromagnetic radiation
receiver, the apparatus comprising:-
- 5 an array located between each object and receiver for reflecting
and dispersing incident electromagnetic radiation away from each
receiver, the array having a plurality of substantially reflective panels,
characterised in that the panels are arranged at different angles to
the plane of the array.
- 10 2. Apparatus according to Claim 1, wherein the array is attached to an outer
surface of each object.
3. Apparatus according to Claim 1 or 2, wherein at least one of the panels
is made of material substantially reflective to electromagnetic radiation.
4. Apparatus according to Claim 1 or 2, wherein at least one of the panels
15 comprises a substrate having a substantially reflective coating.
5. Apparatus according to any of the preceding claims, wherein at least one
of the panels is substantially absorptive to electromagnetic radiation.
6. Apparatus according to any of the preceding claims, wherein at least one
of the panels is generally planar.
- 20 7. Apparatus according to Claims 1 to 5, wherein at least one of the panels
is generally curved.
8. Apparatus according to any of the preceding claims, wherein at least one
of the panels is irregular in shape.
9. Apparatus according to any of the preceding claims, wherein at least one
25 of the panels has a substantially reflective multi-faceted surface.
10. A method for reducing the electromagnetic radiation reflected from at
least one object in the direction of at least one electromagnetic radiation
receiver, the method comprising the steps of:

- 8 -

i) determining the direction of each electromagnetic radiation receiver from each object;

ii) providing an array having a plurality of substantially reflective panels between each object and receiver; and

5 iii) arranging the panels to reflect and disperse incident electromagnetic radiation away from each receiver;

characterised in that step iii) includes arranging the panels at different angles to the plane of the array.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☒ FADED TEXT OR DRAWING
- ☒ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.